CAREER AND PROGRAM DESCRIPTION

Engineering is a profession in which knowledge of the sciences, gained through study and experience, is applied for the benefit of society. Engineers solve technical problems as members of project teams or as individual specialists. Work may involve research, development, design, planning, fabrication, construction, supervision and management.

PCC offers curricula equivalent to the first two years of study for most engineering disciplines at Portland State University (PSU), Oregon State University (OSU), the University of Portland (UP), Washington State University-Vancouver (WSUV) and Oregon Institute of Technology (OIT). These engineering disciplines include: Chemical Engineering, Civil Engineering, Construction Engineering Management, Electrical and Computer Engineering, Environmental Engineering, Industrial Engineering, Manufacturing Engineering, Mechanical Engineering and Renewable Energy Engineering.

Equivalent first and second year courses are also available for students interested in other majors or universities. (Note: not all majors listed are available at all the institutions listed.)

Advising guides outlining which engineering, mathematics, science and general education courses to take for the disciplines listed above have been prepared in cooperation with PSU, OSU and OIT. Following these advising guides will prepare students to transfer to their upper division studies. It is recommended that students prepare to transfer by selecting courses that meet lower division university requirements rather than by seeking a degree. Students interested in a degree should refer to the Comprehensive Degree Requirements section of this catalog for information concerning the granting of degrees.

DEPARTMENT PREREQUISITES

Academic Prerequisites

• Students must place in WR 115 and MTH 251. High school courses in chemistry, physics and computer literacy are highly recommended. Students lacking these courses are encouraged to take Preparatory Chemistry CH 151, and/or a computer science course (meet with an advisor to determine the appropriate course), prior to beginning the program.

• Students lacking the necessary prerequisites may upgrade their skills by taking writing, mathematics, science and computer literacy courses. To arrange a meeting with an engineering advisor, visit www.pcc.edu/programs/engineering-transfer/contacts.html to make an appointment.

Other Prerequisites

• None